

**PATENT** 

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN THE APPLICATION OF:

KEVIN CRATHER ET. AL.

CASE NO.: CL1610USNA APPLICATION NO.: 10/643254

CONFIRMATION NO.: 4632

GROUP ART UNIT: UNKNOWN

**EXAMINER: UNKNOWN** 

FILED: August 18, 2003

FOR: APPARATUS, SYSTEM AND METHOD FOR MAKING HYDROGEL

**PARTICLES** 

## INFORMATION DISCLOSURE STATEMENT

**Commissioner for Patents** P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In compliance with 37 CFR 1.97 and 1.98, Applicants bring to the attention of the U.S. Patent and Trademark Office information listed on the enclosed PTO/SB/08A and PTO/SB/08B forms. Also, attached please find a copy of the International Search Report and copies of those references cited therein.

Should any fee be required in connection with the filing of this Information Disclosure Statement, please charge such fee to Deposit Account No. 04-1928 (E. I. du Pont de Nemours and Company).

Respectfully submitted,

LINDA AXAMEŤHY FLOYD

Attorney for Applicants Registration No.: 33,692 Telephone: (302) 892-8112

Facsimile: (302) 992-5374

Dated: 17 Suplember 2004



## Certificate of Mailing under 37 CFR 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

on 17 September 2007

Melissa McCullin

Typed or printed name of person signing Certificate

Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

10/643254
CL1610USNA
Information Disclosure Statement
PTO/SB/08A - 2 forms
PTO/SB/08B - 1 form
International Search Report

References (39)

This collection of information is required by 37 CFR 1.8. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.8 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Complete if Known Substitute for form 1449A/PTO Application Number 10/643254 INFORMATION DISCLOSURE August 18, 2003 Filing Date STATEMENT BY APPLICANT First Named Inventor KEVIN CRATHER ET. AL **Group Art Unit** Unknown (use as many sheets as necessary) Unknown **Examiner Name** Attorney Docket Number CL1610USNA Sheet of

U.S. PATENT DOCUMENTS							
Examiner Initials *	Cite No.1	<u> </u>	cument Number - Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		US -	5,698,237 A	12-16-1997	BACHER et al.		
		US-	5,895,617 A	04-20-1999	MIZUGUCHI et al.		
	_	US -	5,942,170 A	08-24-1999	PEITZ		
		US -	6,143,221 A	11-07-2000	GUROL		
		us -	6,267,575 A	07-31-2001	ROOYAKKERS et al.		
		us -	6,379,137 B1	04-30-2002	ECKER		
		US -	6,506,807 B1	01-14-2003	YANAGIHARE et al.		
		US -	6,592,350 B1	07-15-2003	CHSZANIECKI		
		us -	6,551,643 B1	04-22-2003	BERNATZ et al.		
		US -					
		US -					
	<del>                                     </del>	US -					
	<u> </u>	US -					
		US -					
		US -					
	<b>†</b>	US -					
		US -					
	†	US -					
	1	US -					
		US -					
	$T^{T}$	US -					
		us -					

FOREIGN PATENT DOCUMENTS									
Examiner	Cite	Foreign Patent Document	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear				
Initials*	No.1	CountryCode <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	MM-DD-YYYY	Applicant of Cited Document					
						止			
	-								
						π			
						T			
					<del> </del>	┢╤			
						╁			
					<del> </del>	╁			
	<u> </u>					ᄔ			

Examiner Signature	Date Considered	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not EAAMINIER. Initial in reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation it not in comformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.com/www.uspto.c

Initial Collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by This collection of information is required by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, any including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any including gathering, preparing, and submitting the complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number Complete if Known Substitute for form 1449A/PTO **Application Number** 10/643254 INFORMATION DISCLOSURE August 18, 2003 Filing Date STATEMENT BY APPLICANT KEVIN CRATHER ET. AL. First Named Inventor Group Art Unit Examiner Name (use as many sheets as necessary)

Sheet	1	of 1 Attorney Docket Number CL1610USNA						
	OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS							
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.						
		WILLER DE OLIVEIRA ET AL., Journal of Applied Polymer Science, vol. 6:63-73, 1996, Hydrogels From Polysaccharides I Cellulous Beads for Chromatographic Support						
		HARRY R. BRANDENBERGER ET AL., Biotechnol. Prog., vol. 15:366-372, 1999, Immobilization of Highly Concentrated Cell Suspensions Using the Laminar Jet Breakup Technique						
		MICHAEL ZC. HU ET AL., Biotechnol. Prog., vol. 13:60-70, 1997, Biosorption of Uranium by Pseudomonas aeruginosa Strain CSU Immobilized in a Novel Matrix	<b>X</b>					
		J. TRAMPER, Trends in Biotechnology, vol. 3:45-50, 1985, Immobilizing Biocatalyst for Use in Syntheses						
		ULF PRÜBE ET AL., Biotechnology Techniques, vol. 12, no. 3:105-108, 1998, The Jet Cutting Method as a New Immobilization Technique  DOUGLAS. B. SEIFERT ET AL., Biotehnol. Prog., vol. 13:562-568, 1997, Production of Small, Monodispersed Alginate Beads for Cell Immobilization						
		S. F. D'SOUZA, Indian J. Microbil., vol. 29(2):83-117, 1989, Immobilized Cells: Techniques and Applications						
i								
			_					
Examine Signature		Date Considered						

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here it english ranguage Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, uspection of preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08A (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 2

200000000000000000000000000000000000000						
Complete if Known						
Application Number	10/643254					
Filing Date	August 18, 2003					
First Named Inventor	KEVIN CRATHER ET. AL.					
Group Art Unit	Unknown					
Examiner Name	Unknown					
Attorney Docket Number	CL1610USNA					

	U.S. PATENT DOCUMENTS							
Examiner Initials *	Cite No.1		ocument Number Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
		US -	3,846,529 A	11-05-1974	POTEET, III			
		US -	5,028,224 A	07-02-1991	PIEPER et al.			
		US -	5,429,788 A	07-04-1995	RIBBLE et al.			
		US -	4,639,423 A	01-27-1987	KAHLERT et al.			
		US -	2,254,237 A	09-02-1941	NASH et al.			
		US -	3,014,246 A	12-26-1961	COOK et al.			
		US -	3,029,466 A	04-17-1962	GUILL			
		US -	3,070,835 A	01-01-1963	ALSYS			
		US -	3,207,818 A	09-21-1965	MARSHALL			
		US -	3,316,590 A	05-02-1967	RETTIG			
		US -	5,609,892 A	03-11-1997	GARCIA et al.			
		US -	3,341,892 A	09-19-1967	MAYNER			
		US -	3,709,641 A	01-09-1973	SAREM			
		US -	4,025,252 A	05-24-1977	HUNKE			
<del></del>		US -	4,245,972 A	01-20-1981	ANDERS			
		US -	4,461,737 A	07-24-1984	VOSS			
		us -	4,580,967 A	04-08-1986	GUTIERRZ-RUBIO			
		US -	4,846,644 A	07-11-1989	LIN			
	1	US -	4,850,835 A	07-25-1989	RUDOLPH			
	<del>                                     </del>	US -	5,143,673 A	09-01-1992	GRIMMINGER			
	<del>                                     </del>	US -	5,215,763 A	06-01-1993	MATTERA			
	<u> </u>	US -	5,611,983 A	03-18-1997	MA et al.			

	FOREIGN PATENT DOCUMENTS								
Examiner	Cite		Publication Date MM-DD-YYYY	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages or Relevant				
Initials*	No.1	CountryCode <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)		Applicant of Cited Document	Figures Appear	T <sub>6</sub>			
		DD 253 244 A1	01-13-1988	LOTHAR et al.					

		T	
Examiner Signature	Date Considered		

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \(^1\) Applicant's unique citation designation number (optional). \(^2\) See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.com/www.uspto.c

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.